Game Over IPv4: The need of IPv6 for the future of games

Summary

This document aims to help understanding the issues and discussions listed on the proposal. First we will show some statistics about IPv6 usage worldwide to give a brief overview about how Internet Service Providers, Internet Content Providers and End Users are moving towards a IPv6 future. The second topic show the relevance of Video games and video game players statistics in general. Finally the third topic will explain some research that was made about IPv6 status on Online Games. This includes some Games Companies, such as Riot Games and Gaming Platform Companies such as Playstation, Nintendo and Microsoft.

IPv6 Statistics

Below we show some statistics about IPv6 usage and deployment around the world. The first data is an analysis that Google does from its servers. The second one is the same analysis, but from Akamai servers. The third analysis is an analysis that Cisco does collecting multiple sources and making a compilation of different analysis and parameters, giving a score of IPv6 deployment for each country.

Google

Google collects all incoming traffic on their services and display how much traffic is going via IPv6 in comparison to IPv4. Google also show the IPv6 traffic on each country worldwide.

https://www.google.com/intl/en/ipv6/statistics.html (Latest access in June, 2018)

Akamai

Akamai lists its top IPv6 talkers countries, ordering by percentage of IPv6 versus IPv4 traffic of each country.

https://www.akamai.com/uk/en/about/our-thinking/state-of-the-internet-report/state-of-the-internet-ipv6-adoption-visualization.jsp (Latest access in June, 2018)

Cisco

Cisco collects data from multiple sources and plots them in one summary page so you can see how much IPv6 content, IPv6 prefixes, IPv6 transit and IPv6 users each country have.

http://6lab.cisco.com/stats/ (Latest access in June, 2018)

Games usage

Below are two statistics collected about gaming industry relevance and players profiles. The first one shows that in Brazil, more than 20% of households have some kind of gaming console. The second one shows that in USA, more than 60% of households have some kind of gaming console.

http://cetic.br/tics/domicilios/2016/domicilios/A/ (Latest access in June, 2018)

http://www.theesa.com/about-esa/essential-facts-computer-video-game-industry/ (Latest access in June, 2018)

IPv6 Games Support

Here are listed some of the popular gaming platforms and games in general that shows lack of IPv6 support in various forms.

Steam (Valve)

Discussion Forum

https://steamcommunity.com/discussions/forum/10/3183345176709857653/ (Latest post in November, 2017 - latest access in June, 2018)

NAT64 issues

https://github.com/ValveSoftware/steam-for-linux/issues/3372 (Latest post in June, 2018 - latest access in June, 2018)

https://github.com/ValveSoftware/steam-for-linux/issues/2912 (Latest post in May, 2017 - latest access in June, 2018)

Lack IPv6 Support

https://news.ycombinator.com/item?id=16385319 (Latest post in March, 2018 - latest access in June, 2018)

League of Legends (Riot Games)

Video

https://www.youtube.com/watch?v=vX4scKXpGGI (Latest post in March, 2015 - latest access in June, 2018)

Discussion Forum

https://boards.na.leagueoflegends.com/en/c/general-discussion/rqkjzupK-ipv6-compatibility (Latest post in February, 2018 - latest access in June, 2018)

https://boards.na.leagueoflegends.com/en/c/help-support/jEP5dbvn-league-of-legends-client-doesnt-support-ipv6 (Latest post in June, 2016 - latest access in June, 2018)

Reddit

https://www.reddit.com/r/leagueoflegends/comments/4lyqq6/why_isnt_the_lol_client_designed_to_work_with_ipv6/ (Latest post in June, 2016 - latest access in June, 2018)

"The League of Legends client is designed to work with IPv4"

http://support.lol.garena.com/en_SG/articles/398 (Latest post in June, 2017 - latest access in June, 2018)

Nintendo

Discussion Forum

https://en-americas-support.nintendo.com/app/social/questions/detail/qid/71817/kw/ipv6 (Latest post in January, 2018 - latest access in June, 2018)

WOW - Blizzard

Discussion Forum

https://us.battle.net/forums/en/wow/topic/20754366342#post-2 (Latest post in February, 2018 - latest access in June, 2018)

https://us.battle.net/forums/en/wow/topic/20761747486#post-2 (Latest post in February, 2018 - latest access in June, 2018)

Playstation Network (SONY)

Discussion Forum

https://community.playstation.com/content/pdc/us/en_US/pdc-communities/playstation-general.topic.html/ipv6_psn_and_youc-bUKX.html (Latest post in May, 2018 - latest access in June, 2018)

https://www.reclameaqui.com.br/playstation-brasil-oficial/problema-com-ipv6_q0p-VI9GQ-7kXMjr/ (Latest post in June, 2017 - latest access in June, 2018)

https://www.reclameaqui.com.br/playstation-brasil-oficial/instabilidade-da-conexao-com-a-internet_aEyqHcpHt6e4JSch/ (Latest post in March, 2018 - latest access in June, 2018)

EA - XBOX

Official help page

https://help.ea.com/en-us/help/console/connection-troubleshooting-advanced-xbox/ (Latest post in October, 2017 - latest access in June, 2018)